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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,798	01/09/2006	Mituo Nakamura	2005-2058A	3772

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EXAMINER

CAJILIG, CHRISTINE T

ART UNIT	PAPER NUMBER
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3633

NOTIFICATION DATE	DELIVERY MODE
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02/04/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/563,798	Applicant(s) NAKAMURA, MITUO	
	Examiner CHRISTINE T. CAJILIG	Art Unit 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 12, 14-20, 22, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 12, 14-20, 22, 24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/11/10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/05/10 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zagray (U.S. Patent No. 2,696,102).

Regarding claim 11, Zagray discloses a block of a plurality of blocks *for constructing a flat structure by arranging the plurality of blocks in a flat state, each block, including said block, of the plurality of blocks having outer upper and lower peripheral surfaces thereof brought into contact with each other, said block of the plurality of blocks comprising a plurality of through holes (24) for having linear or bar-like first stretching members inserted therein; a row of recessed portions (18, 20) formed on*

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said outer upper and lower peripheral surfaces of said block, the recessed parts crossing an axial direction of said plurality of said through holes and for having, in a direction three-dimensionally crossing the axial direction of said plurality through holes second stretching members disposed therein; and a cavity (22) extending throughout said block and having an opening at said upper and lower peripheral surfaces of said block, such that said cavity crosses said recessed portions, and wherein the cavity of is arranged along a lengthwise direction of said row of recessed portions, and such that a width W1 of each cavity of said plurality of cavities is greater than a width W2 of each recessed portion of said row of recessed portions and extends beyond the width W2 of each recessed portion so as to cover the width W2 of each recessed portion (See Figure 6), the width W1 and the width W2 being measured in a direction perpendicular to the lengthwise direction of said row of recessed portions.

Zagray does not disclose a plurality of cavities.

It has been held that a mere duplication of parts, such as the duplication of the cavities, has no patentable significance unless a new and unexpected result is produced. A duplication of parts is generally recognized as being within the level of ordinary skill in the art. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1955). Having a plurality of cavities would increase the bonding strength between adjacent blocks as well as create a more lightweight block.

Regarding claim 12, Zagray further discloses that said plurality of through holes (24) are provided in parallel with each other having intervals therebetween in a through-

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thickness direction of a body of said block for construction or in a direction perpendicular to the through-thickness direction of said body.

Claims 11- 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi (U.S. Patent No. 3,209,510) in view of Baldwin (U.S. Patent No. 6,397,549).

Regarding claim 11, Nakanishi discloses a block of a plurality of blocks *for constructing a flat structure by arranging the plurality of blocks in a flat state, each block, including said block, of the plurality of blocks having outer upper and lower peripheral surfaces thereof brought into contact with each other*, said block of the plurality of blocks comprising a plurality of through holes (17) *for having linear or bar-like first stretching members inserted therein*; a row of recessed portions (13, 63) formed on said outer upper and lower peripheral surfaces of said block, the recessed parts crossing an axial direction of said plurality of said through holes and for having, in a direction three-dimensionally crossing the axial direction of said plurality through holes second stretching members disposed therein; and plurality of cavities (15) extending throughout said block and having an opening at said upper and lower peripheral surfaces of said block, such that said cavity crosses said recessed portions.

Nakanishi does not disclose a plurality of cavities such that each cavity of said plurality of cavities is arranged along a lengthwise direction of said row of recessed portions, and such that a width W1 of each cavity of said plurality of cavities is greater than a width W2 of each recessed portion of said row of recessed portions and extends beyond the width W2 of each recessed portion so as to cover the width W2 of each

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recessed portion, the width W1 and the width W2 being measured in a direction perpendicular to the lengthwise direction of said row of recessed portions.

Baldwin discloses cavities (135, 145, 175) wherein each cavity is arranged along a lengthwise direction of a row of recessed portion (155, 165), and such that a width W1 of each cavity of said plurality of cavities is greater than a width W2 of each recessed portion of said row of recessed portions and extends beyond the width W2 of each recessed portion so as to cover the width W2 of each recessed portion, the width W1 and the width W2 being measured in a direction perpendicular to the lengthwise direction of said row of recessed portions (See Col 8, Ln 39-50) to provide sufficient width to increase bonding between blocks when filler material is poured.

It would have been obvious to a person having ordinary skill in the art at the time of the Applicant's invention to modify the structure of Nakanishi to have the cavity width wider than the recess portions as taught by Baldwin to provide cavities with sufficient width to facilitate flow of bonding material and enhance bond between adjacent blocks. Moreover, It has been held that a mere duplication of parts, such as the duplication of the cavities, has no patentable significance unless a new and unexpected result is produced. A duplication of parts is generally recognized as being within the level of ordinary skill in the art. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1955). Having a plurality of cavities would increase the bonding strength between adjacent blocks as well as create a more lightweight block.

Regarding claim 12, Nakanishi modified by Baldwin further discloses that said plurality of through holes (17) are provided in parallel with each other having intervals

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therebetween in a through-thickness direction of a body of said block for construction or in a direction perpendicular to the through-thickness direction of said body.

Regarding claim 13, Nakanishi modified by Baldwin further discloses a plurality of said cavities (15), said cavities extending throughout said block, each of said cavities having an opening at more than one location on said outer and upper lower peripheral surfaces of said block.

Regarding claims 14, 22, and 23, Nakanishi modified by Baldwin further discloses a panel (Col 3, Ln 39-41) comprising a plurality of blocks as claimed in claims 11, 12, or 13 (see rejections above) in a flat state such that outer peripheral surfaces thereof are brought into contact with each other, and such that said plurality of through holes (17) of each of said plurality of blocks are in communication with said plurality of through holes of another of said plurality of blocks; first stretching members (25) inserted into the plurality of through holes of said plurality of blocks; second stretching members (23) disposed on said recessed portions of said plurality of blocks, wherein said plurality of blocks are bonded with pressure by generating a tensile forces on said first and second stretching members

Regarding claim 15, Nakanishi modified by Baldwin further discloses a gap filling agent (Col 3, Ln 22) *for dispersing a reaction force* is disposed between said blocks of said plurality of blocks which are adjacent to each other.

Regarding claims 16, 17, and 24, Nakanishi modified by Baldwin further discloses reaction force, block body members (washers and nuts – Col 3, Ln 28-30) for generating tensile force on said stretching member are attached to and adjacent one of

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said outer peripheral portions of said blocks for construction, the outer peripheral surfaces being located on peripheral portions of said panel.

Regarding claims 18 and 19, Nakanishi modified by Baldwin further discloses that said gap filling agent is a curable cement paste or a material deformable by the pressure generated by the tensile force (Col 3, Ln 22).

Regarding claims 20, 25, and 26, Nakanishi in column 3, lines 15-41 discloses a method of forming a panel for structure comprising steps of arranging said plurality of blocks for construction claimed in claims 11, 12, or 13 (see rejections above) in a flat state, such that each block of said plurality of blocks is adjacent to another block of said plurality of blocks, such that a gap filling agent for dispersing stress is disposed between outer peripheral surfaces of said blocks of said plurality of blocks, and such that said plurality of through holes (17) are in communication with said plurality of through holes of another block of said plurality of blocks, inserting said first stretching members (25) into said plurality of the through holes while disposing said second stretching members (23) on said recessed portions of said plurality of blocks, and loading tensile force on said first and second stretching members to bond said blocks of said plurality of blocks together with pressure.

Regarding claim 21, Nakanishi modified by Baldwin further discloses a plurality of said cavities (15), said plurality of said cavities extending throughout said block, each of said cavities having an opening at more than one location on said outer upper and lower peripheral surfaces.

Response to Arguments

Applicant's arguments with respect to claim 12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE T. CAJILIG whose telephone number is (571) 272-8143. The examiner can normally be reached on Monday-Thursday, 9 am - 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on (571) 272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DAVID DUNN/
Supervisory Patent Examiner, Art Unit 3636

/CHRISTINE T CAJILIG/
Examiner, Art Unit 3633